

REMARKS

In the prior Office Action, the Examiner rejected Claims 22, 36 through 38, 40, and 42 through 47 under 35 U.S.C. § 103(a) as being unpatentable U.S. Patent No. 5,496,099 to Resch in view of U.S. Patent No. 4,143, 514 to Lieber and U.S. Patent No. 5,261,730 to Steiner et al. (Steiner '730) or U.S. Patent No. 5,123,713 to Steiner (Steiner '713). Applicants respectfully disagree.

Applicants respectfully request clarification of the combination(s) proposed by the Examiner. It is unclear which elements of the invention the Examiner has asserted are shown by the Resch reference and which are shown by the Lieber reference. Further, Applicants request clarification of the proposed combinations as they apply to the specific limitations of each of the independent Claims 22, 36, 37, 38, 40, and 42.

Regardless of the specifics of the proposed combination(s), no motivation has been given to combine the Resch reference and the Lieber reference. Absent any motivation for combining the references in the proposed manner, the proposed combination of references must fail. Accordingly, the claimed invention is clearly patentable over the art of record. Applicant respectfully requests that the Examiner explain the motivation for combining the references in the proposed manner.

The Examiner has asserted that the limitations of "blend control" of the first and second signals merely amount to an obvious equivalent to the multiple signal processing discussed in the Steiner '730 reference. Applicants respectfully disagree. Claim 22 defines the invention as a hydraulic brake system including a control unit for controlling the normal hydraulic energy source and the isolation valves, the control unit responding as a blended function of both the first signal and the second signal, with the contribution of the second signal relative to the first signal generally varying as a function of the first signal. Claim 42 defines the invention as a brake system including a control unit responsive to a demand signal for controlling the operation of the vehicle brake, the demand signal being generated as a blended function of both the first output signal and the second output signal. Applicants respectfully request evidence to support the Examiner's assertion that the above limitations of Claims 22 and 42 are an obvious equivalent to the multiple signal processing discussed in the

Steiner '730 reference.

The Examiner has asserted that the separator units at 41-44 in the Steiner '730 reference or at 24, 26 in the Steiner '713 reference are an obvious alternative equivalent arrangement to the arrangement shown at 68 in the Resch reference. The Resch reference discloses an auxiliary cylinder 59 that is provided so that "brake fluid can be displaced at a controllable pressure level into the front-axle brake circuit I in a sufficient quantity." See Col. 12, lines 32-38. The auxiliary cylinder 59 includes a housing 68. Thus, as understood by the Applicants, the Examiner has asserted that the separator units 41-44 in the Steiner '730 reference or at 24, 26 in the Steiner '713 reference are an obvious alternative equivalent arrangement to an auxiliary cylinder providing a controlled pressure level of brake fluid to a brake circuit as shown in the Resch reference. Applicants respectfully disagree and request evidence supporting the assertion that the separator units at 41-44 in the Steiner '730 reference or at 24, 26 in the Steiner '713 reference are an obvious alternative equivalent arrangement to the arrangement shown at 68 in the Resch reference.

The Examiner further states that it would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references in such a way that they meet applicant's claimed limitations, because the brake systems of the Resch reference and the Steiner references are so closely related. This rejection is respectfully traversed.


A statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *See MPEP 2143.10(IV) citing Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993)*. Further, the level of skill in the art cannot be relied upon to provide the suggestion to combine references. *See MPEP 2143.10(IV) citing Al-Site Corp. v. VSI Int'l Inc., 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999)*.

The Resch reference discloses a hydraulic dual-circuit brake system with a panic brake assist feature (ref. Col. 1, lines 28-35). The Resch reference teaches a master cylinder 18 provided with a vacuum booster 17 which booster can be electronically controlled by operation of valves 41 and 42. The valves 41 and 42 respond to an electronic control unit 22, when operation of the booster without operation of the brake pedal is desired. The Resch reference teaches only a pedal position sensor 21 for determining a brake demand signal, and the vacuum booster 17 is directly actuated by the brake pedal 16. Therefore, the Resch reference teaches away from the use of the additional expensive sensors of the Steiner '730 reference to achieve a brake demand signal based on blending a brake pedal position signal and a pressure signal. Thus, absent the impermissible use of hindsight, there is no motivation to combine the Resch reference and the Steiner '730 reference as proposed by the Examiner.

The Lieber reference teaches a master cylinder with a hydraulic booster. The hydraulic booster includes a pump 7 that pumps fluid from the reservoir 4 into an intermediate chamber 16 in the master cylinder. A boost valve 12 is operated by the brake pedal to vary the pressure of hydraulic brake fluid applied to the master cylinder secondary piston 24, driving the master cylinder to supply hydraulic brake fluid to the second brake circuit 25 (and thence, via valves 41 and 42 and conduits 26 and 27 to the brakes on the secondary brake circuit. The hydraulic booster (7,12) is directly actuated by the brake pedal 1. Therefore, the Lieber reference teaches away from the use of the additional expensive sensors of the Steiner '730 reference to achieve a brake demand signal based on blending a brake pedal position signal and a pressure signal. Thus, absent the impermissible use of hindsight, there is no motivation to combine the Lieber reference and the Steiner '730 reference as proposed by the Examiner.

It is believed that Claims 1 through 20 and 22 through 47 are in condition for allowance. Return of the original copy of the patent will be occur when Applicants' attorney is notified that all claims are allowed, and no other issues remain to be resolved.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Staci E. Schweikert', is written over a horizontal line.

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